

Hewlett Packard Docket No.: 10012354-1

PATENT

Claim Listing

1. (Currently amended) A method of eliminating stale information from a computer graphics buffer, comprising:

reading a clear count value associated with a pixel location in the buffer;

comparing the clear count value with a current clear count; and

if the clear count value does not equal the current clear count, writing a predetermined value to the pixel location in the buffer;

wherein the steps are performed for each of the pixels defining a region of interest in the buffer, and are performed using a block transfer operation wherein a source region and a destination region both correspond to the region of interest.

- 2-8. (Canceled)

9. (Currently amended) The method of claim [8] 1, wherein:

all of the pixels in the region of interest are read and written during the block transfer operation; and

for a given pixel, if the clear count value equals the current clear count, a stored value read from the pixel location is written back to the pixel location.

- 10-11. (Canceled)

12. (Original) A method of eliminating stale information from a computer graphics buffer, comprising:

performing a block transfer operation on pixel locations of the buffer;

wherein a source region and a destination region for the block transfer operation are the

Hewlett Packard Docket No.: 10012354-1

PATENT

same; and

wherein, for each pixel location, the block transfer operation comprises:

reading a clear count value associated with the pixel location;

comparing the clear count value with a current clear count; and

if the clear count value does not equal the current clear count, writing a predetermined value to the pixel location.

13. (Original) The method of claim 12, further comprising:

if the clear count value equals the current clear count, writing a stored value read from the pixel location back to the pixel location.

14. (Original) The method of claim 12, where:

the clear count value is read from the pixel location in the buffer.

15. (Original) The method of claim 12, wherein:

the predetermined value and the current clear count are stored in storage structures of a fast clear system.

16. (Original) The method of claim 12, wherein:

the writing step comprises replacing the clear count value with the current clear count.

17. (Original) A method of eliminating stale information from a buffer of computer graphics system, comprising:

using a fast clear mode, rendering in a region of interest within the buffer;

determining, responsive to a state of the computer graphics system, that the fast clear mode should be discontinued; and

Hewlett Packard Docket No.: 10012354-1

PATENT

for each pixel location in the region of interest:

reading a clear count value associated with the pixel location;
comparing the clear count value with a current clear count; and
if the clear count value does not equal the current clear count, writing a
predetermined value to the pixel location.

18. (Original) The method of claim 17, wherein the region of interest is a window.

19. (Original) The method of claim 17, further comprising:
determining, responsive to a state of the computer graphics system, that the fast clear mode
may be resumed; and
resuming operation in the fast clear mode.

20. (Original) The method of claim 17, wherein:
the clear count value is read from the pixel location in the buffer.

21. (Original) The method of claim 17, wherein:
the predetermined value represents a background color.

22. (Original) The method of claim 17, wherein:
the predetermined value and the current clear count are stored in storage structures of a fast
clear system.

23. (Original) The method of claim 17, wherein:
the reading a writing steps are performed using a block transfer operation wherein a source
region and a destination region of the block transfer operation both correspond to the

Hewlett Packard Docket No.: 10012354-1

PATENT

region of interest.

24. (Original) The method of claim 23, wherein:

all of the pixels in the region of interest are read and written during the block transfer operation; and

for a given pixel, if the clear count value equals the current clear count, a stored value read from the pixel location is written back to the pixel location.

25. (Original) The method of claim 17, further comprising:

reading a stored value from the pixel location; and

if the clear count value equals the current clear count, writing the stored value back to the pixel location.

26. (Original) The method of claim 17, wherein:

the writing step comprises replacing the clear count value with the current clear count.

27. (Currently amended) Computer program code embodied in a machine-readable storage or transmission medium which, when executed on a computer, causes the computer to perform a method of eliminating stale information from a computer graphics buffer, comprising:

reading a clear count value associated with a pixel location in the buffer;

comparing the clear count value with a current clear count; and

if the clear count value does not equal the current clear count, writing a predetermined value to the pixel location in the buffer;

wherein the steps are performed for each of the pixels defining a region of interest in the buffer, and are performed using a block transfer operation wherein a source region

Hewlett Packard Docket No.: 10012354-1

PATENT

and a destination region both correspond to the region of interest.

28-30. (Canceled)

31. (Currently amended) The computer program code of claim [30] 27, wherein:
all of the pixels in the region of interests are read and written during the block transfer operation; and
for a given pixel, if the clear count value equals the current clear count, a stored value read from the pixel location is written back to the pixel location.

32. (Canceled)

33. (Original) Computer program code embodied in a machine-readable storage or transmission medium which, when executed on a computer, causes the computer to perform a method of eliminating stale information from a computer graphics buffer, comprising:

performing a block transfer operation on pixel locations of the buffer;
wherein a source region and a destination region for the block transfer operation are the same; and

wherein, for each pixel location, the block transfer operation comprises:

reading a clear count value associated with the pixel location;

comparing the clear count value with a current clear count; and

if the clear count value does not equal the current clear count, writing a predetermined value to the pixel location.

34. (Original) The computer program code of claim 33, further comprising:

Hewlett Packard Docket No.: 10012354-1

PATENT

if the clear count value equals the current clear count, writing a stored value read from the pixel location back to the pixel location.

35. (Original) The computer program code of claim 33, wherein:
the clear count value is read from the pixel location in the buffer.

36. (Original) The computer program code of claim 33, wherein:
the predetermined value and the current clear count are stored in storage structures of a fast clear system.

37. (Original) The computer program code of claim 33, wherein:
the writing step comprises replacing the clear count value with the current clear count.

38. (Original) Computer program code embodied in a machine-readable storage or transmission medium which, when executed on a computer, causes the computer to perform a method of eliminating stale information from a buffer of a computer graphics system, comprising:
using a fast clear mode, rendering an image in a region of interest within the buffer;
determining, responsive to a state of the computer graphics system, that the fast clear mode should be discontinued; and
for each pixel location in the region of interest:
reading a clear count value associated with the pixel location;
comparing the clear count value with a current clear count; and
if the clear count value does not equal the current clear count, writing a predetermined value to the pixel location.

PATENT

Hewlett Packard Docket No.: 10012354-1

39. (Original) The computer program code of claim 38, wherein the region of interest is a window.
40. (Original) The computer program code of claim 38, further comprising:
determining, responsive to a state of the computer graphics system, that the fast clear mode may be resumed; and
resuming operation in the fast clear mode.
41. (Original) The computer program code of claim 38, wherein:
the reading a writing steps are performed using a block transfer operation wherein a source region and a destination region of the block transfer operation both correspond to the region of interest.
42. (Original) The computer program code of claim 41, wherein:
all of the pixels in the region of interest are read and written during the block transfer operation; and
for a given pixel, if the clear count value equals the current clear count, a stored value read from the pixel location is written back to the pixel location.
43. (Original) The computer program code of claim 38, wherein:
the writing step comprises replacing the clear count value with the current clear count.